29. PROBABLE ODOUR TRAILS IN TERMITES (ISOPTERA)

In January last I happened to collect a part of a carton nest of *Microcerotermes heimi* with a large number of living individuals (workers, soldiers and nymphs) in it, and kept it in the laboratory on a slab of stone. It was noticed, after a few hours, that the termites started coming out of the nest and wandered about on the slab in different directions. It was left like this overnight and next morning it was seen that the termites were moving on a definite trail between the nest and a hole in the wooden frame of a nearby window. Some individuals were going away from the nest while others were returning back to it. They kept rigidly to the track thus established and the whole scene looked very much as in the typical ants (Formicinae). Some obstructions (a piece of chalk or stone etc.) were put across the track and it was found that these confused the termites and deflected them in various directions at the place of obstruction. In trying to get round the obstacle they almost completely lost their way unless they accidently struck the trail again when the file was resumed. If they retouched the track on this side of the obstruction they followed it mechanically back to the starting point; if by chance on the other side of the obstacle then the journey was completed. Similar disorganisation took place when the track was rubbed out with a finger tip at some point.

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Delhi, 8. *Lecturer in Zoology*
April 3, 1952.

[According to T. E. Snyder (1935), 'Our Enemy the Termite', p. 51, body odour, as well as contact stimuli, aid blind worker and soldier termites to maintain a single file formation outside of the main nest. This can be observed by watching termites under an upturned log or stone. Either one or the other of these stimuli, or possibly both, enables termites to run a straight course to a source of food and might account for other activities, sometimes grouped under the heading of the mysterious 'spirit of the colony'.—Eds.]

30. ON THE OCCURRENCE OF THE FRESHWATER MEDUSA IN THE KRISHNARAJASAGAR ON THE CAUVERY

In a recent note regarding the distribution of the Indian freshwater medusa, *Limnocnida indica* Annandale, in the April 1951 issue of this *Journal* (**49**, 799-801) Jones pointed out the present range of its distribution and stated that a systematic survey of the distribution of the medusa and a study of its life-history should yield interesting results. In this connection it may be of interest to record here the

occurrence of the freshwater medusa, in the Krishnarajasagar Reservoir on the Cauvery River in Mysore.

While collecting fish specimens in the morning (between 7 a.m. and 9 a.m.) on 27-4-1949, on the right bank of the Reservoir near the village of Sagarkatte about 7 miles above the dam and below the confluence of the Laxmanthirtha River, one of the tributaries of the Cauvery, the disturbance caused by the cast-net brought up several medusa, presumably *Limnocnida indica* Annandale, to the surface. They were seen bobbing up and down in the turbid water and about half a dozen specimens were collected which were subsequently handed over to Shri M. S. R. Rao of the Zoological Department, Science College, Mysore. The depth of water at the place of collection was about 5 feet and the bed was rocky. About a week previously there were a few showers but the weather on the above date was bright.

The presence of the freshwater medusa in the Krishnarajasagar extends its distribution on the western side of the Sahyadris, from the Krishna to the Cauvery system. On the western slopes of the Sahyadris it is known from the Periyar and the Sharavati Rivers. The medusa in all probability has a wider distribution than hitherto recorded both on the eastern as well as western drainages of peninsular India.

BARRACKPORE, D. R. KRISHNAMURTHY, B.SC.
October 30, 1951.

[This medusa had so far been recorded only from the Krishna drainage. Dr. S. Jones, D.SC., in communicating the above note expresses the opinion that its occurrence in the Cauvery system, which is *south* of the Krishna system, is of significant zoogeographical interest since it extends its distribution in peninsular India so much further southward. Its apparent absence north of the Krishna drainage seems curious. He thinks that the occurrence of freshwater medusa also in Africa provides an instance of the sort of discontinuous distribution that might lend support to the view of the existence of a former land connection between Africa and peninsular India. Dr. Jones points out that practically nothing is so far known about the life-history of this remarkable organism.—EDS.]

31. NOTES ON THE GENUS *LUDWIGIA* LINN.

THE NUMBER OF STAMENS

The separation of the two genera, *Jussiaea* Linn. and *Ludwigia* Linn., apparently rests mainly on the (supposed) difference in the number of stamens. According to authoritative works, the number of stamens in each genus is stated to be: *Jussiaea* 8 and *Ludwigia* 4. Members of both genera are very similar, not only in habit but also in habitat. When making field sketches of the floral details